

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions, and listing of claims in the application:

LISTING OF CLAIMS:

Claim 1 (Currently amended) A system for detection of cardiac events occurring in a human patient, comprising:

(a) at least two electrodes for obtaining an electrical signal from a patient's heart;

(b) an electrical signal processor electrically coupled to said electrodes for processing the electrical signal; and,

(c) patient alarm means coupled to the electrical signal processor for generating ~~an escalating~~ a sensory alarm signal received by the patient over a predetermined time period subsequent to the electrical signal processor detecting a cardiac event, the alarm signal includes a multiplicity of successive sets of alerting signals, each set including two or more alerting signals, the alerting signals within each set being spaced apart in time by an intra-set time interval, the alarm signal escalating in sensory stimulation by decreasing the intra-set time interval in successive sets of alerting signals during the predetermined time period.

Claim 2 (Original) The system for detection of cardiac events occurring in a human patient as recited in claim 1 wherein the cardiac event is coronary ischemia indicated by a change in the ST segment of the electrical signal.

Claim 3 (Original) The system for detection of cardiac events occurring in a human patient as recited in claim 1 wherein the cardiac event is coronary ischemia indicated by a change in the ST segment of the electrical signal at an elevated heart rate.

Claim 4 (Original) The system for detection of cardiac events occurring in a human patient as recited in claim 1 wherein the cardiac event is an arrhythmia.

Claim 5 (Original) The system for detection of cardiac events occurring in a human patient as recited in claim 4 wherein the arrhythmia is high heart rate.

Claim 6 (Original) The system for detection of cardiac events occurring in a human patient as recited in claim 4 wherein the arrhythmia is low heart rate.

Claim 7 (Original) The system for detection of cardiac events occurring in a human patient as recited in claim 4 wherein the arrhythmia is an unsteady heart rate.

Claim 8 (Original) The system for detection of cardiac events occurring in a human patient as recited in claim 7 wherein the unsteady heart rate is the result of PVCs.

Claim 9 (Original) The system for detection of cardiac events occurring in a human patient as recited in claim 7 wherein the unsteady heart rate is the result of atrial fibrillation.

Claims 10 - 14 (Cancelled).

Claim 15 (Currently amended) The system for detection of cardiac events occurring in a human patient as recited in claim [[13]] 1 wherein the sets of two or more alerting signals are spaced apart in time by an inter-set time interval

Claim 16 (Original) The system for detection of cardiac events occurring in a human patient as recited in claim 15 wherein the inter-set time interval is longer than the intra-set time interval.

Claim 17 (Original) The system for detection of cardiac events occurring in a human patient as recited in claim 15 wherein the inter-set time interval is greater than one second.

Claim 18 (Original) The system for detection of cardiac events occurring in a human patient as recited in claim 16 wherein the intra-set time interval is less than 1 second.

Claim 19 (Currently amended) A ~~The~~ system for detection of cardiac events occurring in a human patient, comprising: ~~as recited in claim 1 wherein~~

(a) at least two electrodes for obtaining an electrical signal from a patient's heart;

(b) an electrical signal processor electrically coupled to said electrodes for processing the electrical signal; and,

(c) patient alarm means coupled to the electrical signal processor for generating a sensory alarm signal received by the patient over a predetermined time period subsequent to the electrical signal processor detecting a cardiac event, the ~~escalating~~ alarm signal ~~includes~~ including a multiplicity of successive sets of alerting signals, the sets being spaced apart in time by an inter-set time interval, the alarm signal escalating in sensory stimulation by a progressively decreasing inter-set time interval being inserted between successive sets of alerting signals.

Claim 20 (Cancelled).

Claim 21 (Currently amended) A The system for detection of cardiac events occurring in a human patient, comprising: as recited in claim 1 wherein

(a) at least two electrodes for obtaining an electrical signal from a patient's heart;

(b) an electrical signal processor electrically coupled to said electrodes for processing the electrical signal; and,

(c) patient alarm means coupled to the electrical signal processor for generating a sensory alarm signal received by the patient over a predetermined time period subsequent to the electrical signal processor detecting a cardiac event, the ~~escalating~~ alarm signal ~~includes~~ including a multiplicity of successive sets of

alerting signals, each set including one or more alerting signals, the alarm signal escalating in sensory stimulation by the number of alerting signals in each set increasing over time.

Claim 22 (Currently amended) A ~~The~~ system for detection of cardiac events occurring in a human patient, comprising: as recited in claim 21 wherein

(a) at least two electrodes for obtaining an electrical signal from a patient's heart;

(b) an electrical signal processor electrically coupled to said electrodes for processing the electrical signal; and,

(c) patient alarm means coupled to the electrical signal processor for generating an escalating sensory alarm signal received by the patient over a predetermined time period subsequent to the electrical signal processor detecting a cardiac event, the alarm signal including a multiplicity of successive sets of alerting signals, each set including two or more alerting signals, the alarm signal escalating in sensory stimulation by the number of alerting signals in each set increasing over time and the time interval between alerting signals in the sets of alerting signals including 2 or more alerting signals progressively decreases decreasing over time.

Claim 23 (Currently amended) A ~~The~~ system for detection of cardiac events occurring in a human patient, comprising: as recited in claim 1 wherein

(a) at least two electrodes for obtaining an electrical signal from a patient's heart;

(b) an electrical signal processor electrically coupled to said electrodes for processing the electrical signal; and,

(c) patient alarm means coupled to the electrical signal processor for generating a sensory alarm signal received by the patient over a predetermined time period subsequent to the electrical signal processor detecting a cardiac event, the ~~escalating~~ alarm signal ~~includes~~ including a multiplicity of alerting signals, the alarm signal escalating in sensory stimulation by the alerting signals increasing in duration over time.

Claim 24 (Currently amended) A ~~The~~ system for detection of cardiac events occurring in a human patient, comprising: as recited in claim 1 wherein

(a) at least two electrodes for obtaining an electrical signal from a patient's heart;

(b) an electrical signal processor electrically coupled to said electrodes for processing the electrical signal; and,

(c) patient alarm means coupled to the electrical signal processor for generating a sensory alarm signal received by the patient over a predetermined time period subsequent to the electrical signal processor detecting a cardiac event, the ~~escalating~~ alarm signal includes including a multiplicity of alerting signals, the alarm signal escalating in sensory stimulation by the alerting signals progressively increasing in frequency over time.

Claim 25 (Currently amended) The system for detection of cardiac events occurring in a human patient as recited in claim 1 wherein the ~~escalating alarm signal~~ patient alarm means includes an internal alarm ~~signal originating from transducer disposed in an implanted medical device for output of the alarm signal internal to the patient.~~

Claim 26 (Currently amended) The system for detection of cardiac events occurring in a human patient as recited in claim 25 wherein the internal alarm signal ~~is~~ includes a vibration.

Claim 27 (Currently amended) A ~~The~~ system for detection of cardiac events occurring in a human patient, comprising: ~~as recited in claim 25 wherein~~

(a) at least two electrodes for obtaining an electrical signal from a patient's heart;

(b) an electrical signal processor electrically coupled to said electrodes for processing the electrical signal; and,

(c) patient alarm means coupled to the electrical signal processor for generating an escalating sensory alarm signal received by the patient over a predetermined time period subsequent to the electrical signal processor detecting a cardiac event, the escalating alarm signal includes an internal alarm signal originating from an implanted medical device, the internal alarm signal ~~includes~~ including an electrical tickle.

Claim 28 (Original) The system for detection of cardiac events occurring in a human patient as recited in claim 25 wherein the internal alarm signal includes a sound.

Claim 29 (Original) The system for detection of cardiac events occurring in a human patient as recited in claim 25 further including an escalating external alarm signal.

Claim 30 (Currently amended) The system for detection of cardiac events occurring in a human patient as recited in claim 25 further including an external alarm ~~signal generated by system for generating an external alarm system signal,~~ the external alarm signal being is of a constant level of ~~perceptibility to the patient~~ sensory stimulation.

Claim 31 (Currently amended) A ~~The~~ system for detection of cardiac events occurring in a human patient, comprising: ~~as recited in claim 25 further~~ including

(a) at least two electrodes for obtaining an electrical signal from a patient's heart;

(b) an electrical signal processor electrically coupled to said electrodes for processing the electrical signal; and,

(c) patient alarm means coupled to the electrical signal processor for generating an escalating sensory alarm signal received by the patient over a predetermined time period subsequent to the electrical signal processor detecting a cardiac event, the escalating alarm signal includes an internal alarm signal originating from an implanted medical device, the patient alarm means including an external alarm ~~signal generated by system for generating an external alarm system signal,~~ the external alarm signal being initiated at a preset time before ~~the~~ an initiation of the ~~escalating~~ internal alarm signal.

Claim 32 (Original) The system for detection of cardiac events occurring in a human patient as recited in claim 31 wherein the external alarm is an escalating alarm signal.

Claim 33 (Currently amended) A ~~The~~ system for detection of cardiac events occurring in a human patient, comprising: ~~as recited in claim 25 further including~~

(a) at least two electrodes for obtaining an electrical signal from a patient's heart;

(b) an electrical signal processor electrically coupled to said electrodes for processing the electrical signal; and,

(c) patient alarm means coupled to the electrical signal processor for generating an escalating sensory alarm signal received by the patient over a predetermined time period subsequent to the electrical signal processor detecting a cardiac event, the escalating alarm signal includes an internal alarm signal originating from an implanted medical device, the patient alarm means including an external alarm signal generated by system for generating an external alarm system signal, the external alarm signal being initiated at a preset time after the initiation of the escalating internal alarm signal.

Claim 34 (Currently amended) The system for detection of cardiac events occurring in a human patient as recited in claim 33 wherein the external alarm signal is an escalating alarm signal.

Claim 35 (Currently amended) The system for detection of cardiac events occurring in a human patient as recited in claim 1 wherein the ~~escalating alarm signal~~ patient alarm means includes an external alarm ~~signal originating from system for generating the an external alarm system~~ signal external to the patient.

Claim 36 (Currently amended) The system for detection of cardiac events occurring in a human patient as recited in claim ~~[[36]]~~ 35 wherein the ~~internal~~ external alarm signal includes a vibration.

Claim 37 (Currently amended) The system for detection of cardiac events occurring in a human patient as recited in claim ~~[[36]]~~ 35 wherein the ~~internal~~ external alarm signal includes a visual display.

Claim 38 (Currently amended) The system for detection of cardiac events occurring in a human patient as recited in claim [[36]] 35 wherein the ~~internal~~ external alarm signal includes a sound.

Claim 39 (Currently amended) The system for detection of cardiac events occurring in a human patient as recited in claim [[36]] 35 further including an internal alarm signal ~~generated by~~ transducer disposed in an implanted medical device for output of an alarm signal internal to the patient, the internal alarm signal being of a constant level of perceptibility to the patient sensory stimulation.

Claim 40 (Currently amended) The system for detection of cardiac events occurring in a human patient as recited in claim 39 wherein the ~~escalating~~ external alarm signal is initiated at a preset time before the initiation of the ~~constant~~ internal alarm signal.

Claim 41 (Withdrawn) An implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient comprising:

- (a) a pacemaker adapted for insertion into the human patient;
- (b) a pacemaker lead coupled to the pacemaker for obtaining an electrogram electrical signal from the patient's heart;

(c) an electrical signal processor coupled to the pacemaker lead for processing the electrogram electrical signal and detecting a cardiac event; and,

(d) patient alarm means coupled to the electrical signal processor for generating an escalating sensory alarm signal received by the patient over a predetermined time period subsequent to the electrical signal processor detecting the cardiac event.

Claim 42 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 41 wherein the cardiac event is coronary ischemia indicated by a change in the ST segment of the electrogram.

Claim 43 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 41 wherein the cardiac event is coronary ischemia indicated by a change in the ST segment of the electrogram at an elevated heart rate.

Claim 44 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 41 wherein the cardiac event is an arrhythmia.

Claim 45 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 44 wherein the arrhythmia is high heart rate.

Claim 46 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 44 wherein the arrhythmia is low heart rate.

Claim 47 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 44 wherein the arrhythmia is an unsteady heart rate.

Claim 48 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 47 wherein the unsteady heart rate is the result of PVCs.

Claim 49 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 47 wherein the unsteady heart rate is the result of atrial fibrillation.

Claim 50 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 41 wherein the escalating alarm signal progressively increases in amplitude over time.

Claim 51 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 50 wherein the escalating alarm signal increases in amplitude over time only for a preset time period.

Claim 52 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 50 wherein the escalating alarm signal includes a multiplicity of successive alerting signals spaced in time by a time interval, the successive alerting signals increasing in amplitude over time.

Claim 53 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 41 wherein the escalating alarm signal includes a multiplicity of successive

sets of alerting signals, each set including two or more alerting signals the alerting signals within each set spaced apart in time by an intra-set time interval.

Claim 54 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 43 wherein the escalating alarm signal is produced by a decreasing intra-set time interval in successive sets of alerting signals.

Claim 55 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 43 wherein the sets of two or more alerting signals are spaced apart in time by an inter-set time interval

Claim 56 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 55 wherein the inter-set time interval is longer than the intra-set time interval.

Claim 57 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 55 wherein the inter-set time interval is greater than one second.

Claim 58 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 55 wherein the intra-set time interval is less than 1 second.

Claim 59 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 41 wherein the escalating alarm signal includes a multiplicity of successive sets of alerting signals, the sets spaced apart in time by an inter-set time interval.

Claim 60 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 59 wherein the escalating alarm signal is produced by a progressively decreasing inter-set time interval between successive sets of alerting signals.

Claim 61 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in

claim 41 wherein the escalating alarm signal includes a multiplicity of successive sets of alerting signals, each set including one or more alerting signals, the number of alerting signals in each set increasing over time.

Claim 62 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 61 wherein the time interval between alerting signals in sets of alerting signals including 2 or more alerting signals progressively decreases over time.

Claim 63 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 41 wherein the escalating alarm signal includes a multiplicity of alerting signals, the alerting signals increasing in duration over time.

Claim 64 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 41 wherein the escalating alarm signal includes a multiplicity of alerting signals, the alerting signals progressively increasing in frequency over time.

Claim 65 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 41 wherein the escalating alarm signal includes an internal alarm signal originating from an implanted medical device.

Claim 66 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 65 wherein the internal alarm signal is includes a vibration.

Claim 67 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 65 wherein the internal alarm signal includes an electrical tickle.

Claim 68 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 65 wherein the internal alarm signal includes a sound.

Claim 69 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 65 further including an escalating external alarm signal.

Claim 70 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 65 further including an external alarm signal generated by an external alarm system is of constant level of perceptibility to the patient.

Claim 71 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 65 further including an external alarm signal generated by an external alarm system, the external alarm signal being initiated at a preset time before the initiation of the escalating internal alarm signal.

Claim 72 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 71 wherein the external alarm is an escalating alarm signal.

Claim 73 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 65 further including an external alarm signal generated by an external alarm

system, the external alarm signal being initiated at a preset time after the initiation of the escalating internal alarm signal.

Claim 74 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 73 wherein the external alarm signal is an escalating alarm signal

Claim 75 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 41 wherein the escalating alarm signal includes an external alarm signal originating from an external alarm system.

Claim 76 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 76 wherein the internal alarm signal includes a vibration.

Claim 77 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 76 wherein the internal alarm signal includes a visual display.

Claim 78 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 76 wherein the internal alarm signal includes a sound.

Claim 79 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 76 further including an internal alarm signal generated by an implanted medical device, the internal alarm signal being of constant level of perceptibility to the patient.

Claim 80 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 79 wherein the escalating external alarm signal is initiated at a preset time before the initiation of the constant internal alarm signal.

Claim 81 (Withdrawn) An implantable cardiac defibrillator having capability of detecting cardiac events occurring in a human patient comprising:

- (a) a defibrillator adapted for insertion into the human patient;
- (b) at least one lead coupled to the defibrillator for obtaining an electrogram electrical signal from the patient's heart;

(c) an electrical signal processor electrically coupled to said electrode for processing the electrogram electrical system and detecting a cardiac event; and,

(d) patient alarm means coupled to the electrical signal processor for generating an escalating sensor alarm signal received by the patient over a predetermined time period subsequent to the electrical signal processor detecting the cardiac event.

Claim 82 (Withdrawn) The implantable cardiac defibrillator system having capability of detecting cardiac events occurring in a human patient as recited in claim 81 wherein the cardiac event is coronary ischemia indicated by a change in the ST segment of the electrogram.

Claim 83 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 81 wherein the cardiac event is coronary ischemia indicated by a change in the ST segment of the electrogram at an elevated heart rate.

Claim 84 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 81 wherein the cardiac event is an arrhythmia.

Claim 85 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 84 wherein the arrhythmia is high heart rate.

Claim 86 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 84 wherein the arrhythmia is low heart rate.

Claim 87 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 84 wherein the arrhythmia is an unsteady heart rate.

Claim 88 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 87 wherein the unsteady heart rate is the result of PVCs.

Claim 89 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 87 wherein the unsteady heart rate is the result of atrial fibrillation.

Claim 90 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 81 wherein the escalating alarm signal progressively increases in amplitude over time.

Claim 91 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 90 wherein the escalating alarm signal increases in amplitude over time only for a preset time period.

Claim 92 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 90 wherein the escalating alarm signal includes a multiplicity of successive alerting signals spaced in time by a time interval, the successive alerting signals increasing in amplitude over time.

Claim 93 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 81 wherein the escalating alarm signal includes a multiplicity of successive sets of alerting signals, each set including two or more alerting signals the alerting signals within each set spaced apart in time by an intra-set time interval.

Claim 94 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 93 wherein the escalating alarm signal is produced by a decreasing intra-set time interval in successive sets of alerting signals.

Claim 95 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 93 wherein the sets of two or more alerting signals are spaced apart in time by an inter-set time interval.

Claim 96 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in

claim 95 wherein the inter-set time interval is longer than the intra-set time interval.

Claim 97 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 95 wherein the inter-set time interval is greater than one second.

Claim 98 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 95 wherein the intra-set time interval is less than 1 second.

Claim 99 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 81 wherein the escalating alarm signal includes a multiplicity of successive sets of alerting signals, the sets spaced apart in time by an inter-set time interval.

Claim 100 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in

claim 99 wherein the escalating alarm signal is produced by a progressively decreasing inter-set time interval between successive sets of alerting signals.

Claim 101 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 81 wherein the escalating alarm signal includes a multiplicity of successive sets of alerting signals, each set including one or more alerting signals, the number of alerting signals in each set increasing over time.

Claim 102 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 101 wherein the time interval between alerting signals in sets of alerting signals including 2 or more alerting signals progressively decreases over time.

Claim 103 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 81 wherein the escalating alarm signal includes a multiplicity of alerting signals, the alerting signals increasing in duration over time.

Claim 104 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 81 wherein the escalating alarm signal includes a multiplicity of alerting signals, the alerting signals progressively increasing in frequency over time.

Claim 105 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 81 wherein the escalating alarm signal includes an internal alarm signal originating from an implanted medical device.

Claim 106 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 105 wherein the internal alarm signal is includes a vibration.

Claim 107 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 105 wherein the internal alarm signal includes an electrical tickle.

Claim 108 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 105 wherein the internal alarm signal includes a sound.

Claim 109 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 105 further including an escalating external alarm signal.

Claim 110 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 105 further including an external alarm signal generated by an external alarm system is of constant level of perceptibility to the patient.

Claim 111 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 105 further including an external alarm signal generated by an external alarm system, the external alarm signal being initiated at a preset time before the initiation of the escalating internal alarm signal.

Claim 112 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 111 wherein the external alarm is an escalating alarm signal.

Claim 113 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 105 further including an external alarm signal generated by an external alarm system, the external alarm signal being initiated at a preset time after the initiation of the escalating internal alarm signal.

Claim 114 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 113 wherein the external alarm signal is an escalating alarm signal.

Claim 115 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 81 wherein the escalating alarm signal includes an external alarm signal originating from an external alarm system.

Claim 116 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 116 wherein the internal alarm signal includes a vibration.

Claim 117 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 116 wherein the internal alarm signal includes a visual display.

Claim 118 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 116 wherein the internal alarm signal includes a sound.

Claim 119 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 116 further including an internal alarm signal generated by an implanted medical device, the internal alarm signal being of constant level of perceptibility to the patient.

Claim 120 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in

claim 119 wherein the escalating external alarm signal is initiated at a preset time before the initiation of the constant internal alarm signal.

Claim 121 (Withdrawn) The implantable pacemaker system having the capability of detecting cardiac events occurring in a human patient as recited in claim 81 wherein the implantable cardiac defibrillator also includes the capability to pace the heart of the human patient.

Claims 122 - 128 (Cancelled).